

What is claimed is:

1. A conduit for transferring a flowable material, comprising:
a wall member at least partially enclosing an inner region, the inner region being adapted to receive the flowable material and to facilitate transfer of the flowable material
5 from a first location to a second location; and
a plurality of reflective members being at least one of formed within an outer layer of the wall member and disposed on an outer surface of the wall member, the reflective members being adapted to at least partially reflect light incident thereon.
- 10 2. The conduit of Claim 1, wherein the reflective members include reflective glass beads.
3. The conduit of Claim 1, wherein the wall member includes a first portion and a second portion, the first portion having a first concentration of reflective members and the
15 second portion having a second concentration of reflective members.
4. The conduit of Claim 3, wherein the first concentration of reflective members is greater than the second concentration of reflective members.
- 20 5. The conduit of Claim 3, wherein the second portion includes a marking on the wall member corresponding to an outer refueling limit of an aerial refueling system.
6. The conduit of Claim 3, wherein the second portion includes a marking on the wall member corresponding to an inner refueling limit of an aerial refueling system.
- 25 7. The conduit of Claim 1, wherein the wall member includes a cylindrical wall member.



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8. The conduit of Claim 1, wherein the wall member includes a flexible aerial refueling hose.

9. The conduit of Claim 1, wherein the wall member includes a refueling boom.

5 10. An apparatus for transferring a flowable material, comprising:

a tank adapted to contain a flowable material;

a conduit operatively coupled to the tank and adapted to receive the flowable material and to facilitate transfer of the flowable material between the tank and a second location, the conduit including a wall member; and

10 a plurality of reflective members being at least one of formed within an outer layer of the wall member and disposed on an outer surface of the wall member, the reflective members being adapted to at least partially reflect light incident thereon.

11. The apparatus of Claim 10, wherein the reflective members include reflective glass
15 beads.

12. The apparatus of Claim 10, wherein the wall member includes a first portion and a second portion, the first portion having a first concentration of reflective members and the second portion having a second concentration of reflective members.

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13. The apparatus of Claim 12, wherein the first concentration of reflective members is greater than the second concentration of reflective members.

14. The apparatus of Claim 12, wherein the apparatus includes an aerial refueling
25 system, and wherein the second portion includes a marking on the wall member corresponding to an outer refueling limit of the aerial refueling system.



15. The apparatus of Claim 12, wherein the apparatus includes an aerial refueling system, and wherein the second portion includes a marking on the wall member corresponding to an inner refueling limit of the aerial refueling system.

5 16. The apparatus of Claim 10, wherein the conduit includes a cylindrical wall member.

17. The apparatus of Claim 10, wherein the conduit includes a flexible aerial refueling hose.

10 18. The apparatus of Claim 10, wherein the conduit includes a refueling boom.

19. The apparatus of Claim 10, further comprising a pump operatively coupled to the tank and to the conduit and adapted to pump the flowable material from the tank to the conduit.

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20. An aircraft, comprising:

a fuselage;

a propulsion system operatively coupled to the fuselage; and

an aerial refueling system coupled to the fuselage and including:

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a tank adapted to contain a flowable material;

a conduit operatively coupled to the tank and being adapted to receive the flowable material and to facilitate transfer of the flowable material between the tank and a second location, the conduit including a wall member; and

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a plurality of reflective members being at least one of formed within an outer layer of the wall member and disposed on an outer surface of the wall member, the reflective members being adapted to at least partially reflect light incident thereon.

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21. The aircraft of Claim 20, wherein the reflective members include reflective glass beads.



22. The aircraft of Claim 20, wherein the wall member includes a first portion and a second portion, the first portion having a first concentration of reflective members and the second portion having a second concentration of reflective members.

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23. The aircraft of Claim 22, wherein the first concentration of reflective members is greater than the second concentration of reflective members.

24. The aircraft of Claim 22, wherein the apparatus includes an aerial refueling system, and wherein the second portion includes a marking on the wall member corresponding to an outer refueling limit of the aerial refueling system.

25. The aircraft of Claim 22, wherein the apparatus includes an aerial refueling system, and wherein the second portion includes a marking on the wall member corresponding to an inner refueling limit of the aerial refueling system.

26. The aircraft of Claim 20, wherein the conduit includes a cylindrical wall member.

27. The aircraft of Claim 20, wherein the conduit includes a flexible aerial refueling hose.

28. The aircraft of Claim 20, wherein the conduit includes a refueling boom.

29. The aircraft of Claim 20, further comprising a pump operatively coupled to the tank and to the conduit and adapted to pump the flowable material from the tank to the conduit.

30. A method of transferring a flowable material, comprising:

providing a conduit operatively coupled to a tank containing the flowable material, the conduit being adapted to receive the flowable material and to facilitate transfer of the flowable material between the tank and a second location, the conduit including a wall



member having a plurality of reflective members being at least one of formed within an outer layer of the wall member and disposed on an outer surface of the wall member;

illuminating the at least some reflective members with an incident light;

reflecting the incident light using the at least some reflective members; and

transferring the flowable material through the conduit from the tank to the second location.

31. The method of Claim 30, wherein providing a conduit operatively coupled to a tank includes providing a conduit operatively coupled to a refueling tank of a tanker aircraft.

32. The method of Claim 30, wherein providing a conduit including a wall member having a plurality of reflective members includes providing a conduit including a wall member having a plurality of reflective glass beads.

33. The method of Claim 32, wherein providing a conduit including a wall member having a plurality of reflective members includes providing a conduit including a wall member having a first portion and a second portion, the first portion having a first concentration of reflective members and the second portion having a second concentration of reflective members.

34. The method of Claim 30, wherein transferring the flowable material through the conduit from the tank to the second location includes transferring the flowable material through the conduit from the tank to a receiving aircraft.

35. The method of Claim 30, wherein transferring the flowable material through the conduit from the tank to the second location includes pumping the flowable material from the tank.

